

What's the best treatment for sebaceous cysts?

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EVIDENCE-BASED ANSWER

Punch biopsy excision appears to be superior to traditional wide elliptical excision for the treatment of sebaceous cysts when intervention is necessary (strength of recommendation [SOR]: **B**, based on 1 small randomized study). No rigorous methodological studies have compared punch biopsy excision of sebaceous cysts with the minimal excision technique. □

EVIDENCE SUMMARY

Sebaceous cysts – more correctly referred to as epidermal inclusion cysts – are benign lesions of the skin. They rarely require intervention out of medical necessity, but are removed for cosmetic reasons. If the cysts become inflamed, secondary to internal discharge of the cysts' contents, or grow so large that they interfere with the patient's functioning, they may need to be removed. (1)

FAST TRACK

Punch and minimal excision biopsy may have faster healing times and produce less scarring.

Traditional wide excision – involving dissection and removal of the cyst completely from the surrounding tissue through an elliptical incision – is considered the gold standard of treatment. This time-consuming endeavor frequently leads to significant scarring in comparison with minimal excision or punch biopsy, but has almost no recurrence when the cyst wall is entirely removed. (2)

Minimal excision and punch biopsy techniques are purported to produce minimal bleeding, have faster healing times, and produce less scarring. (2) Though both techniques offer a shorter procedural time, they appear to have a slightly higher rates of recurrence.

CLINICAL COMMENTARY

Cyst qualities dictate technique

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There are 3 main techniques for the removal of sebaceous cysts: traditional wide excision, minimal excision, and punch biopsy excision. For large cysts that have never become inflamed or ruptured, I favor the minimal excision technique because it's likely that I'll be able to remove the entire capsule with minimal scarring and faster healing times. Also, for cysts on the face, this method produces a better cosmetic result because of the significantly smaller scar.

However, for a cyst that has ruptured internally, has been expressed manually in the past, or recurs following minimal excision, I find traditional wide excision to be best. In these scenarios, it is extremely time-consuming and often impossible to remove the entire capsule using the minimal excision technique. □

The minimal incision technique involves kneading the lesion following injection of anesthetic and expressing the cyst contents through a 2- to 3-mm incision. Following expulsion of the cyst contents, the loosened capsule is delivered through the small opening. Closure with suture is optional. (3)

Punch biopsy excision is similar to the minimal excision technique except that the incision is made using a single-use disposable dermal punch following injection of lidocaine. Expulsion of the cyst contents, with cyst wall, via lateral pressure is performed and occasionally followed by closure with one suture. (2)

The majority of authors agree that inflamed cysts should be allowed to convalesce prior to attempted removal, though one group (Kitamura et al) (4) suggests primary resection, wound

lavage, and primary suture without drainage for infected epidermal cysts. Rarely are these cysts truly infected. The inflammation is secondary to sebaceous cyst wall rupture with leakage of cyst contents, which elicits the inflammatory response. (5) □

A SMALL STUDY POINTS TO COSMETIC BENEFITS OF PUNCH BIOPSY

To date, no randomized controlled trials have been published that compare the 3 most common techniques for treatment of sebaceous cysts. Only 1 small (n = 60) randomized study compared traditional wide excision with punch biopsy. (6) They found punch biopsy to be less time-consuming and to offer superior cosmetic results. However, cysts larger than 2 cm took longer with the punch biopsy technique.

FAST TRACK

A small study found punch biopsy to have better cosmetic results and to take less time than the traditional wide excision.

Only a single dermatologist performed all of the surgeries, which could introduce bias. There was no mention of blinding of the researcher that subsequently measured the wounds. Of the 31 patients randomized to the punch biopsy technique, there was 1 recurrence in the 16 months of follow-up compared with none in the wide excision arm. This study excluded patients with infected, inflamed, or recurrent cysts. □

RECOMMENDATIONS FROM OTHERS

UpToDate does not recommend excision of an inflamed cyst, suggesting that the inflamed cyst wall is more friable and, therefore, more difficult to remove completely (7). This may lead to a higher rate of recurrence.

Lookingbill and Marks in *Principles of Dermatology* (8) suggest that, frequently, no therapy is indicated for these lesions. If removal is desired or indicated, every effort should be made to remove the entire cyst lining in order to prevent recurrence of the cyst. They recommend removal of the cyst via the traditional wide excision technique. If the cyst ruptures accidentally during the procedure they suggest removing the remaining contents and wall with a curette. □

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